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209  
Descriptive Price List

Economic & Systematic Catalogue  
Economic Catalogue  
List'd FEB 1933

# CACTUS

And Other Interesting Plants

BIBLIOGRAPHY

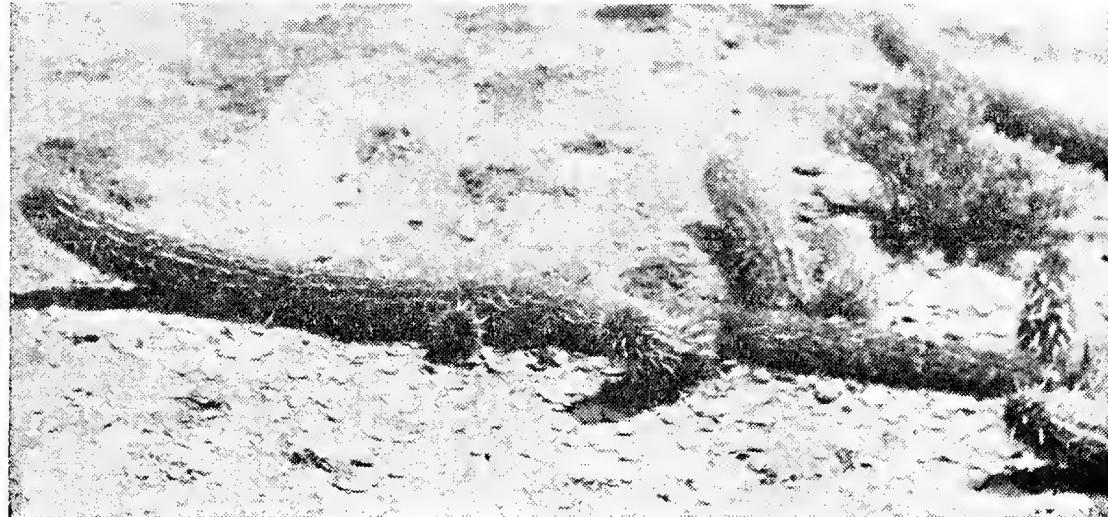
BY W. C. WILHELM

Department of Agriculture.

**Howard E. Gates**

119 South Illinois St. - Anaheim, California

Winner of the Trophy Cups for the best Collection of Cactus Plants at both the 1932 and 1933 Exhibitions of the Cactus & Succulent Society of America.



THE CREEPING DEVIL (*Machaerocereus Eruca*)  
at home on the Magdalena Plain, Lower California, Mexico.

## VISITORS

are welcome in our gardens at all times except Sunday mornings. There are many rare items of interest to all Cactus and Succulent Lovers. We have the World's Premier Collection of Lower California, Mexico, Plants.

## FREE DELIVERY

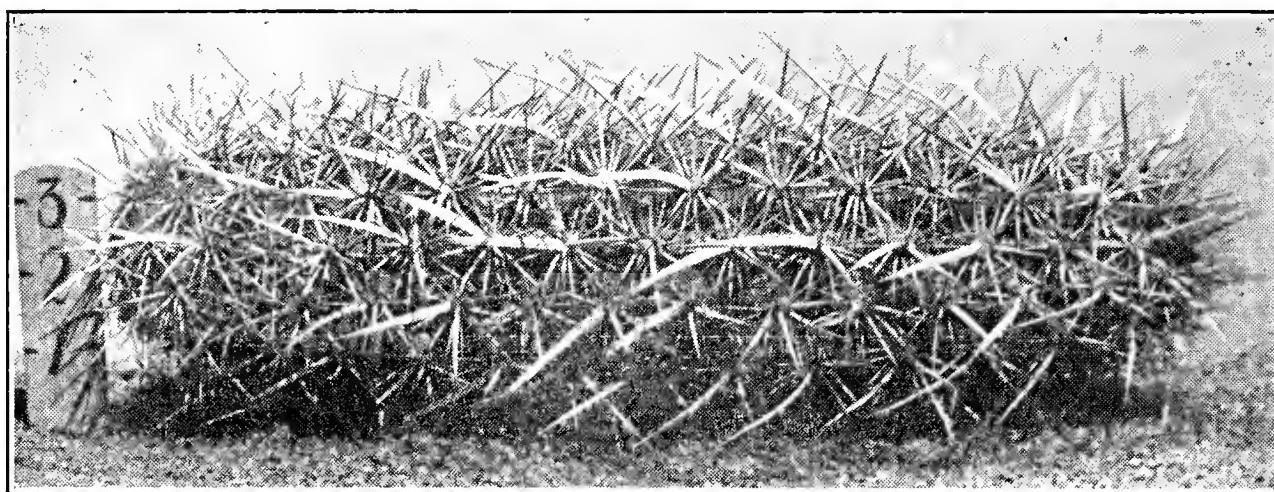
Prices include delivery on all orders amounting to \$1.00 or more. Owing to the transportation costs on heavy items, many of these may be secured at the nursery for somewhat lower prices.

## FOREIGN DELIVERIES

Prices include carriage charges to all countries in the Postal Union on shipments that come within the size and weight limits. Large specimens that require shipment by freight are at customer's expense. Foreign clients should send information regarding any special permit and certification requirements of their respective governments to avoid loss on account of non-compliance.

## WARRANTY

All shipments are warranted to be healthy and be able to pass horticultural inspections. Names, in as far as possible, are in conformity to "Cactaceae" by Britton & Rose. Every effort is made to have plants true to name.



ONE FOOT PLANT MACHAEROCECUS ERUCA  
"The Creeping Devil"

## DEFINITIONS AND ABBREVIATIONS

**Centrals.** The center spines of the spine clusters.

**Cuttings.** Un-rooted, calloused or rooted cuttings. Usually at least calloused.

**Crest, crested.** A freak growth along opposite sides of a line, rather than around a growing point.

**ft.** Signifies foot measure.

**in.** Signifies inch.

**Genera.** One of the larger groups in botanic classifications. The first name is the generic designation. The second the species and the third usually a variety of the species.

**Glochids.** Very fine spines found in the Opuntia spine clusters.

**Heads.** A term denoting short branches.

**Monstrosus.** Freak forms of irregular growth.

**Pads.** The flat joints of Opuntias.

**Platyopuntia.** The flat jointed groups of Opuntias.

**RC.** Well rooted cuttings.

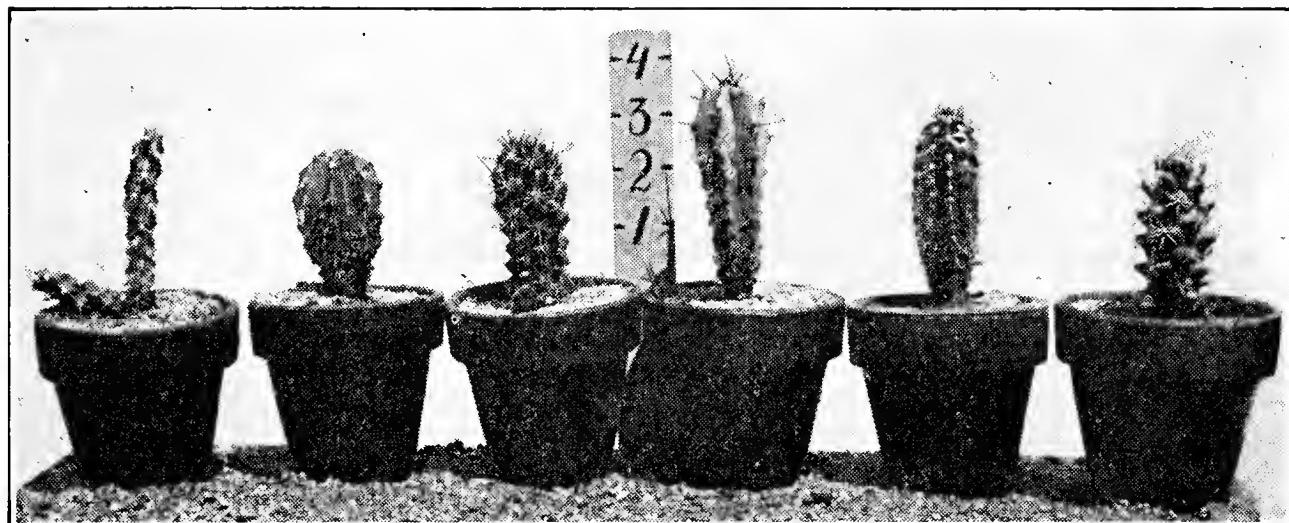
**S.** Seedlings. It is surprising how strong one to two inch seedlings are.

**Size.** Height or diameter, which ever is greater, exclusive of spines.

**Tubercles.** The nipple like projections on which many spine clusters are placed.

## Lower California Plants

We have spent more than a year out of the past five years collecting the strange and rare plants of Lower California, Mexico. Our trips have uncovered many new things, which are being described and named as soon as properly studied. The following list comprises propagations from these trips. Many others will be added as fast as the increase of stock permits. Naturally the prices are higher than those of domestic species, owing to the great cost in time, money and health spent in securing the mother plants.



### LOWER CALIFORNIA SEEDLINGS

*Opuntia invicta*, *Lophocereus schottii*, *Machaerocereus gummossus*,  
*Myrtillocactus cochal*, *Pachycereus pringlei*, *Cochemeia poselgeri*.

**Bartschelia Schumannii.** A relative of the Neomammillarias. Forms compact clusters of low, white spined heads, large pink flower, scarlet fruit.  
.....1 in. S 35c, RC 50c

**COCHEMEIAS** are plants related to the Neomammillarias, but form big clusters of rather tall heads. Flowers are scarlet and shaped like *Zygocactus* flowers. This genera is found only in Lower California and is rare in collections.

**Cochemeia halei.** Tall, cylindrical heads covered with brown to purple straight spines.  
.....2 in. RC 50c, 3 in. RC 75c, 4 in. RC \$1.00

**Cochemeia poselgeri.** Forms clusters of tall heads, overlapping, reddish, tubercles, strongly hooked, dark spine in each cluster. 1½ in. S 35c, 2 in. S 50c,  
3 in. S 75c, RC \$1.00.

**Echinocereus barthelowianus.** Forms dense clusters of small heads, hidden by many straight brown to purple spines. Rooted divisions .....50c

**Echinocereus brandegeei.** Loose clusters of long heads bearing flat, heavy spines, pink flowers .....RC 50c, 75c, \$1.00

**Echinocereus maritimus.** From near seacoast. Forms dense clusters of yellow to gray spined, small heads, yellow flower .....RC 50c

**Ferocactus oreocarpus.** A small barrel cactus from the Lower California coast. Curved, reddish or yellow spines, green-yellow flower  
.....1 in. S 25c, 1½ in. S 50c

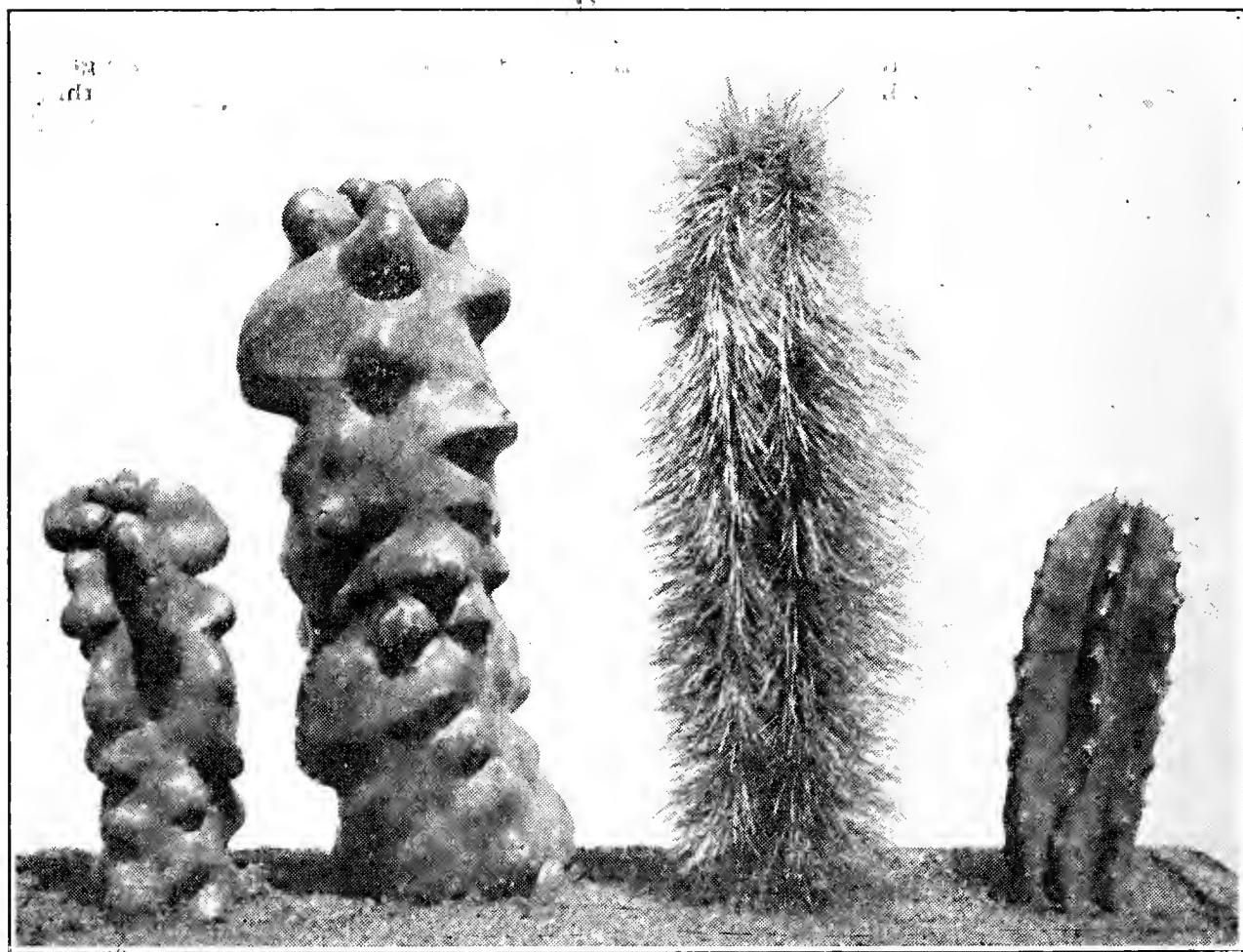
**Ferocactus peninsulae.** A tall Lower California barrel cactus .....1½ in. S 35c

**Ferocactus rectispinus.** A globular to cylindrical, large barrel cactus bearing clusters of round, straight spines with the central spine often measuring 10 inches in length. Very rare, 1½ in. S 50c

**Ferocactus townsendianus.** A large globular type with wide spaced, green ribs and rather small clusters of white spines .....1½ in. S 35c, 2 in. S 50c

**Grusonia santa maria.** Similar to a cylindric *Opuntia* except the spine clusters are on ribs. Purplish, sharp sheathed and barbed spines. A new species we recently discovered on Magdalena Is. .....RC \$1.00

## LOWER CALIFORNIA PLANTS

**LOPHOCEREUS SCHOTTII**

Monstrous forms on left. Normal hairy tip and young branch tip on right.  
Specimens 6 and 12 inches high.

**LOPHOCEREUS** are a genera of many branched Cereus. Branches usually arise from at or near the ground. The lower portions of the branches bear short, stiff spines. The upper portions have numerous hairy spines varying in color from white to black. Trumpet shaped, pink flowers are 1½ in. long. Bright red fruit. We believe all varieties listed are valid species.

**Lophocereus australis.** Slender six to ten angled, hairy tip cuttings. .... 1 ft. \$3.00, 2 ft. \$5.00, 3 ft. \$7.50

**Lophocereus schottii.** Large four to seven angled branches arising from ground, 1 in. S 25c, 2 in. S 50c, 3 in. S 75c  
1 ft. hairy tip RC \$3.00, 1½ ft. \$5.00

**Lophocereus schottii monstruosus.** Habit of growth similar to L. Schottii. No ribs or spines. Branches are covered with smooth, green skinned, irregular protuberances. Grows only in a small

area of Lower California. Our introduction. A sensation wherever shown.  
Cuttings .....  
6 in. \$2.50, 1 ft. \$5., 2 ft. \$11., 3 ft. \$17.

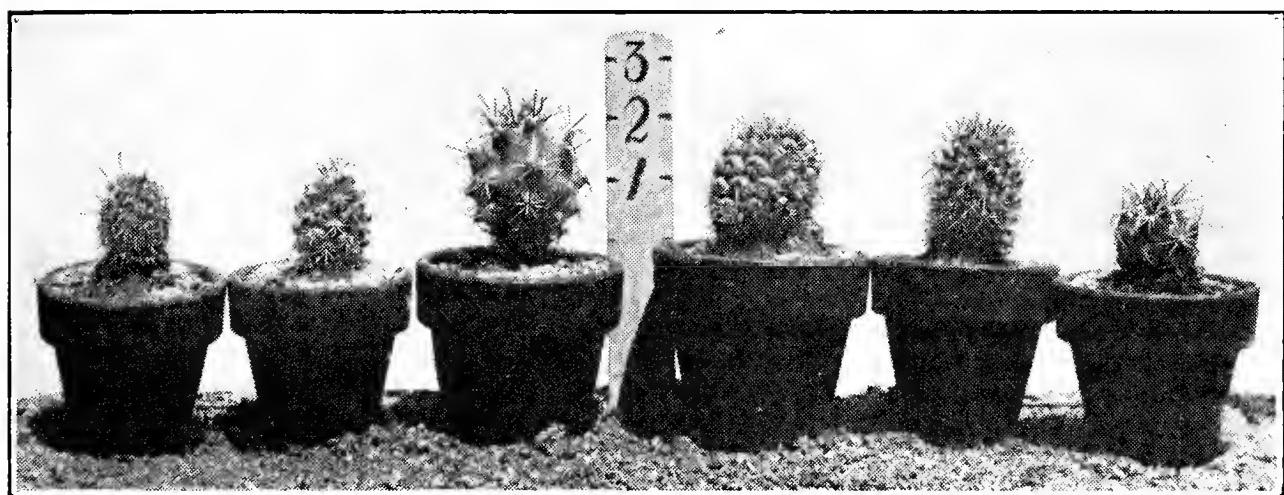
**Machaerocereus eruca.** The famous "Creeping Devil" found only on the shores of Magdalena Bay. Plants grow prostrate on the ground, dying behind as the head advances. Diameter of branches 3 to 5 inches, length 1 to 10 feet. Heavy, recurved, flattened, gray spines. 6 in. \$2.50, 1 ft. \$5.00, 2 ft. \$11.00, 3 ft. \$17.00, 6 ft. \$50.00

**Machaerocereus gunnmosns.** A few ribbed, branching cereus. Night blooming large, white flower with purple shadings. .... 2 in. S 50c, 3 in. S 75c  
Crested cuttings ..... \$5.00 to \$10.00

**Myrtillocactus cochiae.** Peninsular form corresponding to M. geometrizans. Branches when smaller and more freely, greener color, heavy, stiff spines ..... 2 in. S 50c, 3 in. S 75c

## LOWER CALIFORNIA PLANTS

|   |  |                          |
|---|--|--------------------------|
| <b>Neomammillaria armillata.</b> Often forms beautiful clusters of blue-green heads a foot high bearing white to rich brown spines. Branches often marked by dark horizontal bands.....                           | long white spines. Maroon fruit.<br>Plants .....   | \$1.00                   |
| <b>Neom. capensis.</b> One of our own discoveries, officially described in May, 1933, Cactus & Succulent Journal of America. Forms dense clusters of hooked spined, brown heads, pink flower, scarlet fruit ..... | Pachycereus pringlei. The great giant cactus of Lower California. Larger and grows more quickly than Arizona giant. Young plants slenderer .....   | 2 in. S 35c, 3 in. S 50c |
| .....1 in. S 25c, 1½ in. S 35c, RC 50c  | PERESKIAOPSIS in the wild, clamber over small trees in the manner of wild blackberries. They have slender, round branches, long sharp spines and flat, fleshy leaves.  |                          |
| <b>Neom. fraileana.</b> Wonderful, clustered, hooked spined plants of a pink coloring, pink flower, 1 in. S 35c, 1½ in. S 50c   | P. gatesii, a new discovery, bearing rose-pink fruit .....   | RC 50c                   |
| <b>Opuntia burrageana.</b> Slender, branched cholla covered with short yellow to brown spines. Plants .....   | P. porterii. yellow flowers, orange fruit bearing rich, brown bristles .....   | RC 25c                   |
| <b>Opuntia cholla.</b> Erect, bearing many turgid branches, purple flower. Plants .....   | <b>Agave datylio.</b> Beautiful, dark green, narrow leaved plant with brown or black teeth and spines. Grows to 2½ ft. high. Plants .....  | \$1.00                   |
| .....50, 75c, RC of crest \$1.25  | Agave nelsonii. Gray-green, narrow leaves with dark spines. To 2 ft. Plants .....  | 75c                      |
| <b>Opuntia gosseliana.</b> Smooth green pads with white spines, yellow flower. Plants .....   | Dudleyas are very similar in habit to Echeverias. Leaves are more pointed, varying greatly in size, shape and coloring. We have a few rooted cuttings from our Lower Calif. collections. Many as yet undescribed. 75c each |                          |
| <b>Opuntia invicta.</b> Lower California's strange clustered Opuntia that looks like an Echinocereus. Short, stout heads, heavy, flat, gray spines, yellow flower and fruit .....                                 | <b>Pedilanthus macrocarpus.</b> Forms clusters of gray-green, leafless, rod-like, erect branches to three feet, red flower. A Euphorbia. ....  | RC 50c                   |
| 3 in. S 50c   | Crested plants .....   | \$3.00 to \$10.00        |
| <b>Opuntia tesajo.</b> A rare, low, woody, branching plant of the Ramosissima group. Yellow flowers. Plants .....   | <b>Stylphyllum oreocuttil.</b> Clusters of short, gray, cylindrical leaves. Good rockery subject. Plants .....   | 50c                      |
| .....50c  | <b>Stylphyllum No. 292.</b> Clusters of long green, cylindrical leaves. Plants .....   | 25c                      |
| <b>Opuntia No. 95.</b> A slender cylindric plant that naturally grows up through bushes. Scarlet fruit. Belongs to Leptocaulis group. Our discovery. Plants .....   |  |                          |
| .....50c  |  |                          |
| <b>Opuntia No. 136.</b> An undescribed, platyopuntia with round blue pads, bearing  |  |                          |



LOWER CALIFORNIA SEEDLINGS

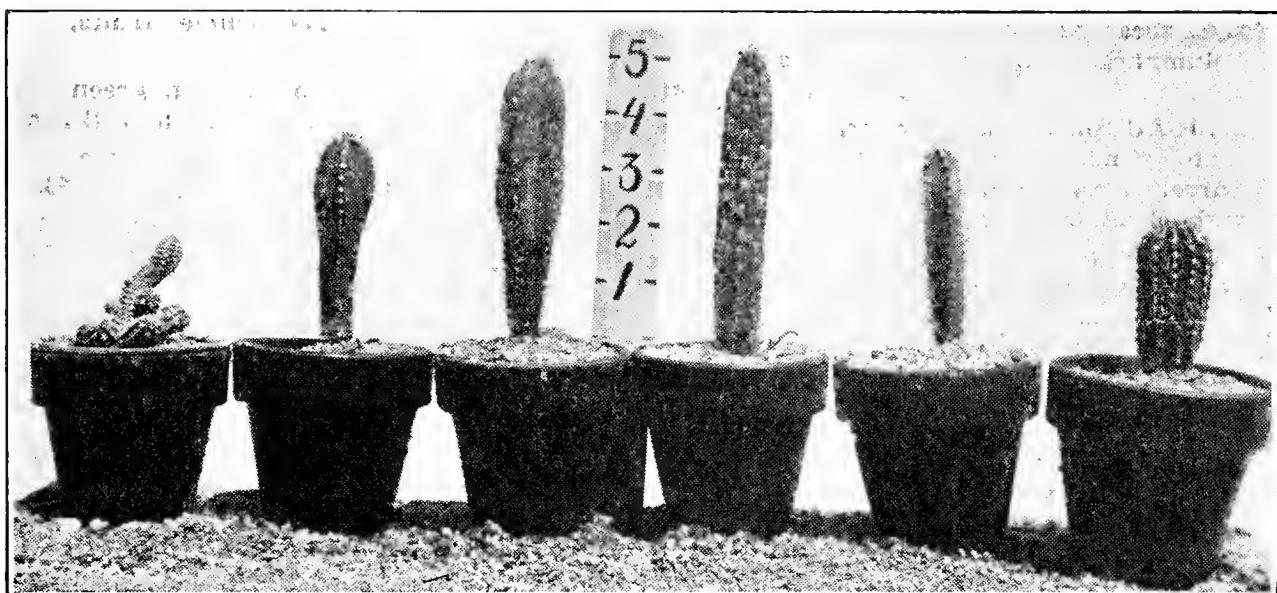
Neomammillaria capensis, Neom. fraileana, Ferocactus townsendianus,  
Bartschelia schumannii, Neom. armillata, Ferocactus oreocutti.

## GENERAL LIST

|   |                                    |
|---|------------------------------------|
| <b>Acanthocerens pentagonus.</b> 3 to 6 angled night blooming cereus. RC 25 to 75c  |                                    |
| <b>Acanthocereus tetracanthus.</b> Beautiful large branched, green cereus with small spines and white flower. Very rare. ....   | RC \$4.00 per ft.                  |
| <b>Ariocarpus fissuratus.</b> The Living Rock. A curious small plant appearing to be carved from stone in a most intricate fashion. Small white to pink flowers. Plants ..... | 25c, 35c, 50c, 75c                 |
| <b>Astrophytum asterias.</b> The only Bishop's Hood native to the United States. Low hemispherical plants bearing rows of woolly dots, yellow flowers. Plants .....           | 75c, \$1.00, \$1.50                |
| <b>Astrophytum ornatum.</b> A beautifully angled Bishop's hood, gray body covered with white dots. ....   | 1 1/4 in. S \$1.00                 |
| <b>Astrophytum myostigma.</b> Bishop's hood. 4 to 5 angles, dark green, covered with white dots. ....   | 1 in. S 60c, 1 1/4 in. S \$1.00    |
| <b>Cactus maxonii.</b> A flattened globular plant with depressed spine clusters. ....   | 1 in. S 35c                        |
| <b>Carnegia gigantea.</b> The giant cactus of Arizona, ....   | 1 1/2 in. S 25c, 1 ft. \$2.50      |
| <b>CEPHALOCEREUS.</b> A group of large, columnar plants bearing weak or hairy spines.   |                                    |
| <b>Ceph. exerans.</b> Green, few angled, weak spined, columnar plant. ....  | 3 in. S 50c                        |
| <b>Ceph. cometes.</b> Large, columnar, gray spined plant bearing yellow wool in old age .....   | 2 in. S 35c                        |
| <b>Ceph. hoppenstedtii.</b> Large columnar plant hidden under white and brown spines .....  | 1 in. S 50c                        |
| <b>Ceph. moritzianus.</b> Light green slender, columnar plant with hairy ribs. 5 in. S 60c  |                                    |
| <b>Ceph. pahmeri.</b> Large columnar plant with white hair over brown spines. ....  | 1 1/2 in. S 25c, 2 in. S 35c       |
| <b>Ceph. pasacana.</b> Large, cylindrical, hardy plant. ....  | 1 in. S 25c                        |
| <b>Ceph. polylophus.</b> Large columnar, yellow spined plant. ....  | 2 in. S 60c                        |
| <b>Ceph. senilis.</b> The famous "Old Man". Columnar plant covered with long, white hair. ....  | 1 1/2 in. S \$1.00                 |
| <b>Cereus azureus.</b> Clambering deep blue cereus with dark spines .....   | 3 in. S 25c                        |
| <b>Cereus chilensis.</b> Large, blue branching, very long spines, large red flowers. ....   | 1 ft. RC \$5.00                    |
| <b>Cerens formosus monstruosus.</b> Small, knobby, knarled branches. ....   | RC 35, 50c                         |
| <b>Cereus hildmannianus.</b> Large, branching, green, plant, white flowers. ....  | 6 in. RC 75c, 12 in. RC \$1.50     |
| <b>Cereus lepidotus.</b> Large, blue-green, columnar .....  | 4 in. S 35c, 5 in. S 50c           |
| <b>Cerens monvilleanus.</b> A real beauty. Giant blue branches bearing contrasting clusters of golden spines. 4 in. S 50c   |                                    |
| <b>Cerens paragneyensis.</b> Large 6 to 8 ribbed, blue plant. 3 in. S 25c, 4 in. S 35c  |                                    |
| <b>Cerens peruviana.</b> Large with many bluish, angled arms. Large, white, night blooming flower .....   | 4 in. S 25c, 9 in. S 50c           |
| <b>Cereus stenagonus.</b> Few angled, large green branches, deep reddish-brown spines. ....   | 4 in. S 35c, 5 in. 50c, 10 in. 75c |
| <b>Cereus usitatus.</b> Large, green, brown spined columnar plant. ....   | 2 in. S 35c                        |
| <b>Cerens valadis.</b> Large, bluish, branching plant, yellow-brown spines. ....  | 4 in. S 50c, 6 in. S 75c           |
| <b>Chamacerens silvestrii.</b> Forms dense clusters of fine spined, small, short heads. Many beautiful scarlet-orange flowers. Clusters .....                                 | 25c                                |
| <b>Coryphantha andreae.</b> Globular, dark green tubercles, yellow to brown spines. ....  | 1 in. S 25c                        |
| <b>Coryphantha desertii.</b> True type. Clusters, large heads, stiff white to black spines. Pink flowers. Plants 10c to \$1.00  |                                    |
| <b>Coryphantha echinoidea.</b> Small, globular plant, star like clusters of varicolored spines, rose pink flower....  | 1 in. S 25c                        |
| <b>Coryphantha elephantidens.</b> Globular, green plant, large flattened tubercles, light spines, large pink flower. 1 in. S 60c  |                                    |
| <b>Coryphantha georgii.</b> Pretty, slender, columnar heads of dark green with purple base, white star spine clusters. ....   | 1 1/2 in. S 35c                    |
| <b>Coryphantha macromeris.</b> Long green nipples tipped with long gray spines, pink flower. Plants .....   | 25, 35c                            |
| <b>Coryphantha ottonis.</b> Globular, gray-green, plant, long crooked spines, white flower .....  | 1 in. S 35c                        |
| <b>Coryphantha recurvata.</b> Forms clusters, large globular heads, yellow recurved spines, small yellow flower. ....   | 1 1/4 in. S 25c, Plants 50c        |

## GENERAL LIST

|   |             |  |
|---|-------------|--|
| <b>Dolichole sphaerica.</b> Forms clusters, small, green, fingered heads, clear yellow flowers. Plants  | 25c         |  |
| <b>Echinocactus grusonii.</b> The golden ball. Large, globular plants with golden yellow spines. $1\frac{1}{2}$ in S 35c, $1\frac{3}{4}$ in S 50c |             |  |
| <b>Echinocactus ingens grandis.</b> Globular, large, gray-green plant   |             |  |
| .....1 in. S 25c $1\frac{1}{2}$ in. S 35c   |             |  |
| <b>Echinocactus lophothele longispinus,</b> Globular, green plant, long spines.   |             |  |
| ..... $\frac{3}{4}$ in. S 75c   |             |  |
| <b>Echinocactus rechnvis.</b> Globular with red to yellow spines.   | 1 in. S 25c |  |
| <b>Echinocereus berlandieri.</b> Forms clusters, slender angled, branches, beautiful magenta flowers,   | RC 15c      |  |
|   |             |  |



## CEREUS SEEDLINGS

Chamocereus silvestris, Cereus peruvianus, C. valadis, Eulychnocereus boliviensis, Cereus monvilleanus, Trichocereus spachianus.

|  |        |
|--|--------|
| <b>Echinocereus blanckii.</b> Forms clusters, few angled branches, large purple flower   | RC 25c |
| <b>Echinocerens bonkeriae.</b> Newly described species of the Engelmannii group. More ribs, shorter spines, deep purple flower. Plants | 50c    |
| <b>Echinocerens delaeti.</b> Bears long white hair similar to the Old Man's over reddish spines, large, pink flower.....               |        |
| ..... $1\frac{1}{4}$ in. S 35c   |        |

**Echinocerens enneacanthus.** Forms clusters, heavy, tall, green heads, white spines, purple flower. RC 50c to \$1.

|   |           |
|---|-----------|
| <b>Echinocerens reichenbachii.</b> Clusters of round fat heads, short, light, depressed spines, large pink flower. Plants | 15 to 50c |
| <b>Echinocerens rigidissimums.</b> The brilliantly spined rainbow cactus. Magnificent large pink flower. ....1 in. S 15c  |           |
| Plants  | 15 to 50c |
| <b>Echinocerens viridiflorus.</b> Mountain dwarfed plants of this green flowered beauty                                   | 15c       |
| <b>Echinomastus intertextus.</b> Globular, small, brown spined plants.  | 15 to 35c |

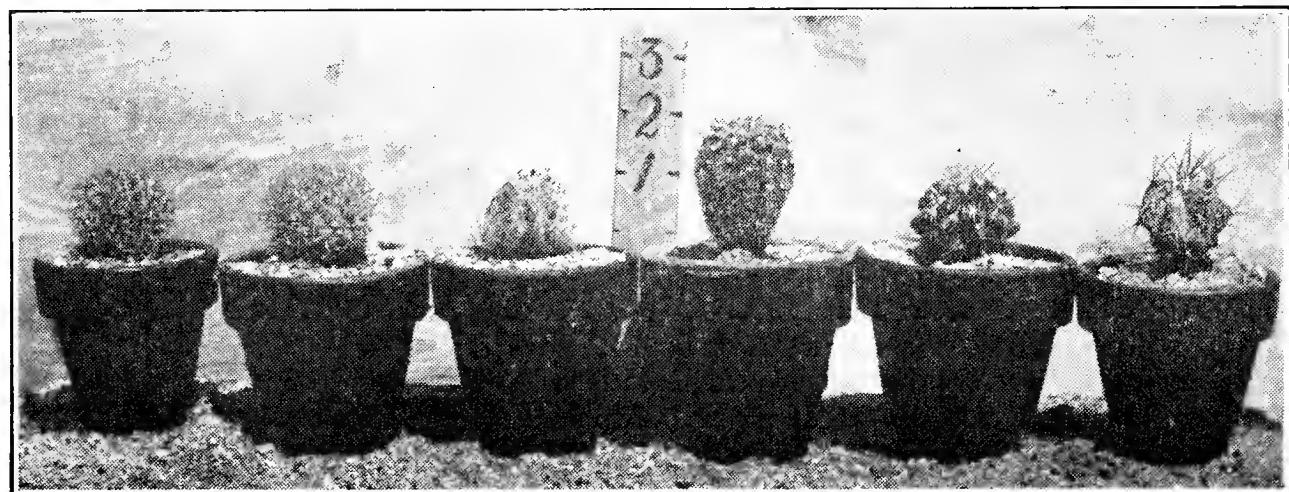
## GENERAL LIST

|  |   |   |                                   |
|--|---|---|-----------------------------------|
| <b>Echinopsis formosa.</b> Globular, green plant, very long reddish-brown spines, large yellow flower. ....  | <b>2 in. S \$1.00</b>                             | tini, but heavier and spinier. White flowers, red fruit. ....   | <b>RC 25c</b>                     |
| <b>Echinopsis multiplex.</b> Globular, green plant bearing immense, trumpet-shaped pink flowers. ....  | <b>2 in. plants 15c</b>                           | <b>Homalocephala texensis.</b> Hemispherical, low plant with heavy, depressed spines, beautiful, feather-like, pink flowers, red fruit. Plants ....     | <b>50c to \$1.00</b>              |
| <b>Echinopsis turbinata.</b> Globular, green plant bearing large white flowers. Plants ....  | <b>15 to 75c</b>                                  | <b>Hylocereus monacanthus.</b> Triangular, wavy margined, green branched, climbing plant, immense, fragrant, white, night blooming flowers. Plants .... | <b>50, 75c</b>                    |
| <b>Epithelantha micromeris.</b> A small plant covered with a net work of white spines that make it look like a golf ball. Very small pinkish flower followed by tiny scarlet fruits. Plants .... | <b>25c, 35c</b>                                   | <b>Hylocereus octagonis.</b> 3 to 4 angled climber. ....  | <b>3 in. S 25c</b>                |
| <b>Escobaria runyonii.</b> Clusters of very small, round, spiny heads. Plants ....   | <b>25c</b>  | <b>Hylocereus undatus.</b> Three ribbed branches with undulated, spineless edges, white flowered night bloomer. Clings to walls. ....                   | <b>RC 25c</b>                     |
| <b>Escobaria sneedii.</b> Similar to E. runyonii. Plants ....  | <b>25c</b>  | <b>LEMAIREOCEREUS</b> are a group of large, branching plants. The Mexicans call their large edible fruits, "Pithayas".                                  |                                   |
| <b>Eulychnocactus boliviensis.</b> Choice. Columnar, green cereus, white spines, ....  | <b>4 in. S 50c, 6 in. S 75c</b>                   | <b>Lem. chende.</b> Large, branching, green plant. ....   | <b>2 in. S 25c</b>                |
| <b>FEROCACTUS</b> are usually large globular to cylindric plants commonly called Barrel Cactus. Europeans class them with Echinocactus.  |   | <b>Lem. de Mixtica.</b> Few angled, large, branching plant. ....  | <b>2½ in. S 50c</b>               |
| <b>F. acanthodes.</b> The red or yellow spined California barrel cactus. Plants ....   | <b>10c to \$10.00</b>                             | <b>Lem. dumortieri.</b> Few angled branches long spines. ....   | <b>2 in. S 25c</b>                |
| <b>F. crassifolius.</b> Globular with depressed spines. ....   | <b>1¼ in. S 35c</b>                               | <b>Lem. griseus.</b> Large, gray, few ribbed, branched plant. ....  | <b>2 in. S 25c</b>                |
| <b>F. hamatacanthus.</b> Dark green plant, gray spines. Plants ....  | <b>\$1.00</b>                                     | <b>Lem. hollianus.</b> Free branching, white spined, small plant. ....  | <b>3 in. S 35c</b>                |
| <b>F. johnsonii.</b> Globular, small plant, lavender-gray spines, yellow flower. ....  | <b>4 in. Plants 50c</b>                           | <b>Lem. laetus.</b> Columnar, green plant with white spines. ....   | <b>2 in. S 25c</b>                |
| <b>F. pringlei.</b> Globular with straight, red spines. ....   | <b>1½ in. S 35c</b>                               | <b>Lem. pinniornis.</b> Large, branched, few ribbed, blue plant. ....   | <b>2 in. S 25c</b>                |
| <b>F. meloactiformis.</b> Globular to cylindric plant with curved yellow spines. ....  | <b>1½ in. S 35c, 2½ in. S 75c</b>                 | <b>Lem. queretaroensis.</b> Large 6 ribbed branching cactus. ....   | <b>2½ in. S 50c</b>               |
| <b>F. robustus.</b> Large plant eventually clustering. ....  | <b>1 in. S 25c</b>                                | <b>Lem. stellatus.</b> Large, branching, low plant. ....  | <b>2 in. S 50c</b>                |
| <b>F. viridescens.</b> Hemispherical, green, nigger head of California coast, green-yellow flowers. Plants ....  | <b>2 in. 15c, 3 in. 25c, 4 in. 50c, 5 in. 75c</b> | <b>Lem. treleasei.</b> Large branching, bluish plant. ....  | <b>3 in. S 25c</b>                |
| <b>Hamatacactus setispina.</b> Globular, small, green plant, pretty yellow flowers. ....   | <b>1 in. S 15c. Plants 25, 35c</b>                | <b>Lem. weberi.</b> Very large, freely spined, branching plant. ....  | <b>4 in. S 75c</b>                |
| Stouter variety, flower shaded with burnt orange. Plants ....  | <b>35, 50c</b>                                    | <b>Lophophora williamsii.</b> The strange peyote or mescal button. Plant is under ground showing only gray-green, mushroom-like top. Plants ....        | <b>15, 25c</b>                    |
| <b>Harrisia martini.</b> Climbing plant with long green branches, large white night blooming flower. ....  | <b>RC 25 to 75c</b>                               | Very large ....   | <b>75c</b>                        |
| <b>Harrisia tortnosa.</b> Similar to H. mar-   |   | <b>Myrtillocactus geometrizans.</b> Large blue, branching plant, small spines. ....   | <b>1½ in. S 25c, 2½ in. S 35c</b> |
|  |   | <b>Neobesseyea similis.</b> Small clustered plant resembling Coryphanthas. Champaigne colored flowers with long pointed petals. Plants ....             | <b>25, 35, 50c</b>                |

## GENERAL LIST

- NEOMAMMILLARIAS** are a genera of small cactus. Some are globular and single headed, while others are taller and much clusters. A large group of straight spined ones is milky. They all are excellent house plants as they grow readily in pots and owing to their size do not take much room.
- Neom. bocasana.** Forms clusters, with spines and long, silky, hairs. .... **3/4 in. S 25c, 1 1/4 in. S 60c**
- Neom. carnea.** Globular, green plants with purple markings, white spines. .... **1 in. S 35c**
- Neom. celsiana.** Beautiful globular plant with cream spines, red flower. .... **1 in. S 50c**

- Neom. hildemanianus.** Dark green plant, prominent tubercles, light spines ..... **1 1/2 in. 25c**
- Neom. knuiziana.** Beautiful globular plant, bearing white hairs and long red hooked spines. .... **1 in. S 50c, 1 1/2 in. S 75c**
- Neom. longicoma.** Forms clusters, globular heads, white hair with brown hooked spines. **1 in. S 35c, 1 1/4 in. S 60c**
- Neom. macdougallii.** Hemispherical, large, milky plant, light spines, creamy flower ..... **1 1/2 in. S 25c**
- Neom. macrocarpa (grahami).** Forms clusters, light colored heads, hooked spines, large pink flowers. Plants ..... **10 to 25c**



## SEEDLING CACTUS

Neomammillaria rodantha, Neom. pfeifferi, Cephalocereus senilis, Echinopsis multiplex, Echinocactus grusonii, Astrophytum ornatum.

- Neom. decipiens.** Forms clusters, deep green body, reddish brown spines, yellow flowers. **1 in. S 60c, 2 1/2 in. S \$1.00**
- Neom. dioica.** Forms clusters of gray-green, rounded heads, brown spines, cream flower, red fruit. Plants **10 to 50c**
- Neom. elegans.** Globular, white spined with long reddish centrals. .... **1 in. S 35c**
- Neom. galleottii.** Globular, green with long dark spines. .... **1 in. S 35c**
- Neom. haageana.** Globular plant, short white spines with long red-brown centrals ..... **1 in. 35c**
- Neom. hahniana.** The famous globular plant covered with long white hair, pink flower. .... **1 in. S 35c, 1 1/2 in. S 60c**
- Neom. heyderi.** Hemispherical, green plant bearing cream flowers followed by red fruit. Plants ..... **15, 25, 35c**

- Neom. magnimamma.** Globular, milky, dark green plant, light spine, white flower, red fruit ..... **1 in. S 35c**
- Neom. mystax.** Globular, milky, green creamy spines, red fruit and flower ..... **1 in. S 35c**
- Neom. nivosa.** Globular, with yellow spines and yellow wool ..... **1 in. S 35c**
- Neom. parkinsonii.** Globular, milky, plant, white recurved spines and wool ..... **3/4 in. S 35c**
- Neom. peterssonii.** Large, globular, green plant, light spines. Pretty ..... **1 1/2 in. S 35c**
- Neom. pfeifferi.** Globular with golden yellow spines ..... **1 1/2 in. S 50c**
- Neom. polyedra.** Globular, milky, light green, brown spined plant ..... **1 in. S 35c**

## GENERAL LIST

- Neom. praeli.** Globular, deep green plant, prominent tubercles ... **1½ in. S 60c**
- Neom. pygmaea.** Small globular plant, white and yellow spines. .... **1 in. S 35c**
- Neom. rodantha chrysacantha.** Cylindrical, gray green plant, beautiful yellow spines ... **1 in. S 35c, 1½ in. S 60c**
- Neom. schiedeana.** Forms clusters globular heads, cream to golden yellow spines in star clusters ... **¾ in. S 60c**
- Neom. sempervivi.** Globular, heavily tubercled, sparsely spined plant. **¾ in. 25c**
- Neom. tricacantha.** Globular plant, white, yellow, red hooked spines, ..... **2 in. S \$1.50**
- Neom. uncinata.** Globular, milky, green plant, short purple, hooked spines, ..... **1 in. S 35c**
- Neom. wildii.** Forms clusters, purple, globular heads, hairy axils, white and yellow spines, many white flowers ..... **¾ in. S 35c**
- Neolloydia clavata.** Cylindric, bluish-green plants with star shaped clusters of light spines ..... **2 in. S 35c**
- Nopalea dejecta.** Erect plant with drooping, green pads bearing white spines. Plants and RC ..... **25 to 75c**
- Nopalea cochinillifera.** Erect plant with large smooth, green pads ..... **RC. 25, 35, 50c**
- Nyctocereus serpentinus.** Slender, tall, cylindrical branches with fine spines. The night blooming cereus of Calif. gardens. Often grown against buildings. Good grafting stock **RC 25, 35, 50c**
- OPUNTIAS** are a big family of cactus, usually large and fast growing. Some have large, flat pads. This type is called "prickly pear", "tuna" and "platyopuntia." Another tree-like type with round branches are called "chollas", "jumping cactus" and "cylindric" opuntias. There are smaller groups of creeping opuntias and small woody branched types.
- O. arborescens.** Compact plant of slender round branches ..... **RC 10, 15, 25c**
- O. brasiliensis.** Forms tree shaped plants with beautiful glossy green pads, yellow flowers ..... **RC 15 to 35c**
- O. basilaris.** Beaver tail. Smooth purplish pads growing from crown of plant, short, very fine glochids, no spines, large magenta flower. Should be in every collection ..... **RC. 15, 25c**  
Smaller padded, yellow flowered variety ..... **RC 25c**
- White flowered variety ..... **RC 50c**
- O. cylindrica.** Beautiful plump green branches, red flower, green fruit. Plants ..... **25 to 75c**
- O. elata elongata.** Smooth nearly spineless oblong pads with purple markings. Many orange flowers. Plants ..... **25c to 75c**
- O. erinacea.** Oval pads bearing long, weak, white to brown spines. Plants ..... **15 to 75c**
- O. grahami.** Forms mats of short, spiny heads. Plants ..... **25c**
- O. grandiflora.** Small round pads, brownish bristles, few white spines, large yellow, red centered flower **RC 15c**
- O. leptocaulis.** Miniature tree bearing rose pink fruits ..... **RC 15 to 25c**
- O. lingiformis.** Cow tongue opuntia with long tapering pads. 1 ft. cuttings **50c**
- O. macrocalyx.** Rather small, light green spineless pads, bearing clusters of minute glochids, yellow flowers, red fruit. ..... **RC 25c**
- O. microdasys.** Flat pads densely covered with fine yellow glochids. A very pretty species. Plants **10c to \$1.00**
- O. macrohiza.** Small, green, few spined pads. Yellow flower ..... **RC 15 to 35c**
- O. monacantha variegata.** Flat pads, beautifully variegated in white, green, yellow and pink. RC and plants **15 to 50c**
- O. opuntia.** Small, round, smooth, pads, large yellow flower ..... **RC 15 to 25c**
- O. parishii.** A low plant that covers the ground like a carpet ..... **RC 15c**
- O. ramosissima.** Small, woody, many branched plant. Very good. Plants **25, 35c**
- O. salmiana.** Wonderful plant from South America. Slender, round, tapering branches, often reddish colored, yellow flower, persistent, cherry colored fruits. Plants ..... **35c**
- O. schottii.** A green jointed carpet plant ..... **RC 15c**
- O. spinosior.** An attractive short spined, tree cholla. Purple flower ..... **RC 15 to 35c**
- O. santa rita.** Round bluish pads, sparsely spined, pretty yellow flower, **RC 35c**
- O. stanleyi.** Large jointed carpet plant. ..... **RC 25 to 50c**
- O. subulata.** Large tree shaped branching plant bearing long persistent leaves ..... **RC 25 to 50c**
- O. ursina.** The Grizzly Bear. Pads bear long, whitened, hairy spines. Plants ..... **25c to \$1.00**

## GENERAL LIST

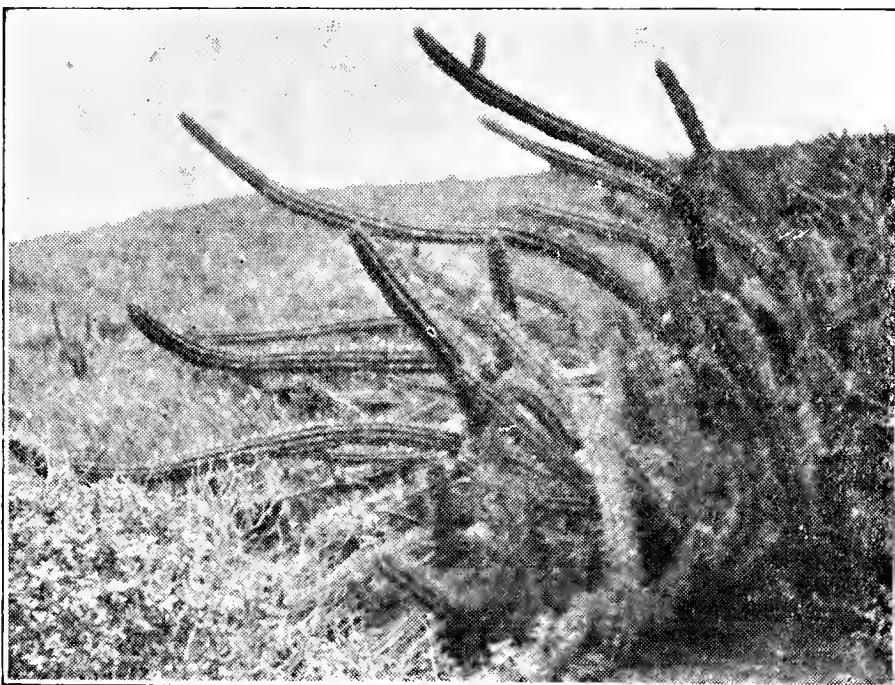
|   |             |   |                              |
|---|-------------|---|------------------------------|
| <b>PACHYCEREUS</b> are among the largest of the cactus. In age they develop large numbers of columnar branches.   |             | Tri. <i>fascicularis</i> . Green columnar plant with an abundance of white spines. ....   | 1½ in S 35c, 2 in. S 50c     |
| <b>P. chrysomallus.</b> Large green, strongly tubercled, yellow spined cereus. ....   | 1 in. S 35c | Tri. <i>lamphrochlorus</i> . Forms clusters of short, stout, green branches. Plants   | \$1.00                       |
| <b>P. marginatus.</b> Large columnar plant with woolly ribs. 2 in. S 25c, 4 in. S 35c<br>Very woolly variety ..... 2 in. S 35c  |             | Tri. <i>pachanoi</i> . Very rare plant from Bolivia. About six rounded ribs bearing small spines. Immense day blooming, white flower. .... 6 in. RC \$2.50, 4 ft RC \$25.00, 5 ft. RC \$30.00 |                              |
| <b>Pereskiopsis chapistle.</b> Heavy caned and large leaved cactus ..... 6 in. RC 35c   |             | Tri. <i>pasacana</i> . Tree like large plant. ....  | 4 in. S 50c                  |
| <b>Pereskia pereskia.</b> The orange leaf cactus. Climbing. Good grafting stock .....   | RC 35c      | Tri. <i>schickendantzii</i> . Forms clusters of short, stout, many ribbed branches, yellow-brown spines ..... 2 in. RC 25c  |                              |
| <b>Phellosperma tetrancistra.</b> Forms clusters, light spines intermixed with dark hooked ones, large pink flower. Plants ..... 25 to 75c  |             | Tri. <i>spachianus</i> . Large upright, many ribbed, light brown spined plant. Excellent grafting stock, ....   | 2 in. S 25c, 1 ft. RC \$1.00 |
| <b>Pilocerens chrysacanthus.</b> Large green, columnar cereus with abundance of yellow spines ..... 2 in. S 35c   |             | Tri. <i>strigosus</i> . Short heads, yellow spines ..... 1 in. S 25c, 2 in. S 50c   |                              |
| <b>Pilocereus stransii.</b> Large weak spined columnar plant, 1 in. S 25c, 1½ in. S 35c ..... 3 in. S 60c, 5 in. S \$1.00   |             | <b>MISCELLANEOUS PLANTS.</b>  |                              |
| <b>Pilocereus trollii.</b> A magnificent columnar plant covered with white hair and reddish spines ..... 1½ in. S 50c   |             | <b>Agave del monte.</b> Beautiful, dwarf, green plant, slightly variegated leaves, threaded edges. Strong plants, 35c   |                              |
| <b>Rathbunia alamoensis.</b> Clambering, many branched cereus with white spines, scarlet flower, red fruit, ..... 2 in. RC 50c  |             | <b>Agave desertii.</b> Gray green leaves, medium size grower. Plants ..... 50, 75, \$1.00   |                              |
| <b>Rebutia miniscula.</b> Forms globular clusters, deep green, fine spined heads, red flower. From South America ..... 1 in. S 50c, 1½ in. S \$1.00   |             | <b>Agave parviflora.</b> Dwarf plant with variegated leaves and short spine. grows in 6 in. pot. Plants ..... 15 to 50c   |                              |
| <b>Scleroactus polyancistra.</b> Globular to cylindric plant hidden by long, papery white spines, mixed with long, brown, hooked ones, pink flower. The most beautiful California cactus and rare. Plants ..... 50c to \$1.50 |             | <b>Agave utahensis</b> var. nevadensis. Gray-green dwarf with toothed edges and long wavy spine. Plants ..... 50c   |                              |
| <b>Scleroactus whipplei.</b> Globular plant, covered with gray and brown hooked spines, pink flower. Plants ..... 50c   |             | <b>Aloe variegata.</b> The Partridge Breast aloe. Small, stiff, angular leaves, marked by horizontal bars of green and white, 2 in. plants ..... 35c  |                              |
| <b>Selenicereus maeonaldii.</b> Slender, angled, long branched, climbing plant, RC 35c  |             | <b>Euphorbia canariensis.</b> Large tree type, upright, four angled branches bearing small spines ..... 5 in. S \$1.00  |                              |
| <b>Selenicereus vagans.</b> Slender, green branches, white flower. Climber, RC 35c  |             | <b>Euphorbia cereiformis.</b> A tall branching Euphorbia suitable for pot culture. Strong ..... RC 35c  |                              |
| <b>TRICHOCEREUS</b> are a large group of South American columnar cereus. They are noted for their very large, white, day blooming flowers.  |             | <b>Euphorbia mammillatns.</b> Another good pot plant. Strong ..... RC 35c   |                              |
| <b>Tri. bridgesii.</b> Columnar, green plant. .... 2 in. S 35c  |             | <b>Gasteria retata.</b> Beautiful, smooth, speckled leaves. Large plants ..... \$1.00   |                              |
| <b>Tri. candicans.</b> Large columnar plant covered with yellow spines. .... 1 in. S 25c  |             | <b>Stapelia gigantea.</b> Large branches, immense, hairy flower. Strong, several branched plants ..... 75c  |                              |
|   |             | <b>Stapelia variegata.</b> The so-called toad cactus, composed of many small fingers, star shaped, speckled flowers. Plants ..... 25c   |                              |

Feb 1 1934

## HOW TO GET TO HOWARD GATES' GARDENS

State Highway No. 101 to Anaheim, west on Center St. to Illinois or West St. turn left and you are there.

It is just an hour's drive from Los Angeles and many other Southern California cities. If you wish prepare your lunch under the trees of the picnic grove in the Anaheim City Park, then look over the excellent park collection while the youngsters have a swim in the park plunge.



"MACHAEROCEREUS GUMMOSSUS IN LOWER CALIFORNIA"

## OUR NEXT MEXICAN COLLECTING TRIP

is planned for January, 1934. A price list is being prepared. These collecting trips are the only source of supply for many rare items. A copy of the price list will be sent on request.

### SEED

We do not sell seed.

### LITERATURE

We recommend membership in the **Cactus & Succulent Society of America** to all Cactophiles and Succulent Gardeners. \$3.00 per year includes membership and subscription to the illustrated monthly Journal. Ted Hutchison, Azusa, California, Secretary.

**The Desert Plant Life Magazine** is an illustrated monthly full of growing tips and interesting descriptive articles. It is well worth the subscription cost of \$1.50 per year. Desert Magazine Publishing Company, Box 68, Pasadena, Calif.

**The Personal Tale of a Cactus Collector** is the intimate story of our 1930 trip into Lower California, Mexico. It gives a glimpse of the joys and tribulations of plant collecting. Price 25 cents.